

Better heart health at midlife linked to less cognitive decline in Black women

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Credit: Christina Morillo from Pexels

Better heart health may mean middle-aged Black women are less likely to show cognitive decline than those with poor heart health, a study has found.

Researchers said the study highlights the importance of heart health in protecting the brain. "Better cardiovascular health in women in their 40s is important to prevent later-life Alzheimer's disease, dementia and to maintain [independent living](#)," the study's lead author, Dr. Imke Janssen, said in a news release. She is a professor of family and [preventive medicine](#) at Rush University Medical Center in Chicago.

The study, [published in](#) the *Journal of the American Heart Association*, compared key heart health measures to Black and [white women](#)'s scores on cognitive tests over 20 years. The [cognitive tests](#) assessed processing speed and working memory.

The heart health standards, developed by the American Heart Association and known as Life's Essential 8, include weight, [blood pressure](#), [blood glucose](#) and cholesterol, plus behaviors such as eating healthy foods, being physically active, not smoking and getting enough sleep.

Black women with good heart health showed little decline in mental processing during the study. Black women with lower heart health, especially as indicated by blood pressure and smoking, had a 10% decrease in processing speed over 20 years.

Processing speed is the pace at which the brain recognizes visual and verbal information. Working memory is the ability to remember and use small pieces of information for daily tasks, including remembering names and doing math.

Previous research has linked heart health to a lower risk of cognitive decline, Janssen said, but questions remain about when the cognitive benefits of heart health begin, whether they occur among people of different races and whether they affect different types of brain function.

The study involved 363 Black and 402 white women from the Chicago site of the [Study of Women's Health Across the Nation](#). The Chicago SWAN group started cognitive testing in 1997, when the women were between 42 and 52 years old. Heart health was assessed only at the time of enrollment, but cognitive testing continued every one to two years through 2017.

In the study, processing speed did not decline among white women with poorer heart health, and heart health did not affect working memory for Black or white women.

"We were surprised that we did not find results like those of past studies, which showed [cognitive decline](#) in Black and white men and women (with poorer heart health), and found cardiovascular health to be more important for white adults rather than people in Black subgroups," Janssen said.

"We think these differences are due to the younger age of our participants, who began cognitive testing in their mid-40s, whereas previous studies started with adults about 10 to 20 years older."

The authors acknowledged several limitations to the study. It included women from just one study site, relied on self-reported measures of heart health and did not include measures that may account for [racial differences](#) in access to health care or the potential influence of structural racism on Black participants.

The next step in the research, Janssen said, would be a clinical trial to confirm whether optimizing heart health in Black women at midlife could slow cognitive aging, maximize independence and reduce racial inequities in dementia risk.

"Take care of your [heart](#)," she said, "and it will benefit your brain."

More information: Imke Janssen et al, Cardiovascular Health, Race, and Decline in Cognitive Function in Midlife Women: The Study of Women's Health Across the Nation, *Journal of the American Heart Association* (2024). [DOI: 10.1161/JAHA.123.031619](https://doi.org/10.1161/JAHA.123.031619)

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